

# Association Between Receipt of Nutritional Counseling During Antenatal Care Visits and Anemia Among Ethiopian Women

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# BACKGROUND

- ▶ Iron deficiency anemia is the leading cause of anemia during pregnancy, and anemia during pregnancy is the most common cause of poor maternal and fetal outcomes.
- ▶ A recent WHO estimate showed that almost quarter (24.34%) of pregnant women suffer from anemia in Ethiopia.
- ▶ Iron deficiency anemia during pregnancy can easily be prevented with adequate diet and iron tablet supplements.



# METHODS

- ▶ **Outcome of Interest:** Anemia. Anemia status was determined through measuring participant's hemoglobin level.
- ▶ **Independent Variable:** Receipt of nutritional counseling during antenatal care visits. Participants were asked if they were provided with nutritional counseling during their antenatal care visits.
- ▶ **Covariates:** age, marital status, parity, pregnancy status, education, employment, household health index, residence, body mass index, number of antenatal care visits, type of delivery, hormonal contraception use, deworming medication use, iron tablet use and HIV status



# RESULTS

- ▶ In the bivariate analysis, a significantly higher proportion of women who did not receive nutritional counseling were anemic compared to those who received nutritional counseling (30.8% vs. 23.1% ;  $p<0.0001$ ).
- ▶ Multivariate analysis showed a statistically significant association between receipt of nutritional counseling during antenatal care visit and anemia status.
- ▶ Compared to those who received nutritional counseling, the odds of being anemic were higher among women who did not receive nutritional counseling during their prenatal care visits AOR (95% CI) = 1.34 (1.07, 1.67;  $p=0.010$ ).

Table 2. Association between nutritional counseling and anemia (N=4384)

	Unadjusted OR (95% CI)	P	Adjusted OR (95% CI)	P
Received nutritional counseling				
No	1.48 (1.19, 1.84)	<0.001	1.34 (1.07, 1.67)	0.010
Yes	Reference		Reference	



# DISCUSSION & CONCLUSION

- ▶ Overall, our findings indicate that, in a nationally representative sample of pregnant women in Ethiopia, there was a significant association between lack of nutritional counseling during antenatal care visits and anemia.
- ▶ The study also pointed out various sociodemographic factors associated with higher odds of being anemic.
- ▶ The study highlights the importance of appropriate nutritional counseling to prevent anemia among pregnant women. Findings from the study indicate the need for:
  - Creating awareness on diet modification during pregnancy
  - Promotion of nutritional counseling during antenatal care visits
  - Further investigation of the quality of nutritional counseling
  - Methods to improve access and quality of nutritional counseling

## References

Available upon request

